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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,993	08/27/2003	David J. Schneider	P755-2/HSCH 2 00007	4365
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FAY SHARPE LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			EXAMINER ANDERSON, JAMES D	
			ART UNIT	PAPER NUMBER
			1614	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/648,993

Applicant(s)

SCHNEIDER, DAVID J.

Examiner

James D. Anderson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 34-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**CLAIMS 34-51 ARE PRESENTED FOR EXAMINATION**

***Continued Examination Under 37 CFR § 1.114***

A request for continued examination under 37 CFR § 1.114, including the fee set forth in 37 CFR § 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR § 1.114, and the fee set forth in 37 CFR § 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR § 1.114. Applicant's submission filed on 7/3/2007 has been entered.

***Response to Amendment***

Applicant's amendment filed 7/3/2007 has been received and entered into the application. Accordingly, claims 43-51 have been added.

Applicant's arguments, filed 7/3/2007, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous Office Actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

***Response to Arguments***

Applicant's arguments filed 7/3/2007 have been fully considered but they are not persuasive.

Firstly, Applicant argues that controlling insects other than Darkling beetles is enabled because one skilled in the art would be able to identify insects that are affected by pH. This

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argument is not persuasive because the claims are not limited to controlling insects having a pH-dependent life cycle. Rather, the claims only recite "controlling insects". As such, the claims read on controlling any and all insects in animal habitats.

Secondly, in response to Applicant's argument that he does not have to list every insect that can be controlled, the Examiner respectfully submits that he never asked for nor required a listing of all insects that can be controlled. Rather, the application of a pH-lowering agent to an animal habitat to control insects is *prima facie* unpredictable because there is no evidence of record that such treatment will control insects. Applicant has presented no evidence that dusting or soaking an animal habitat with a pH-lowering agent results in insect control.

Thirdly, with respect to Applicant's argument that there is sufficient guidance and direction in the specification to practice the claimed invention, it is noted that the specification only provides a cursory mention of controlling insects in an animal habitat with trichloromelamine (TCM). For example, at pages 9-10, it is taught that:

The application of TCM in accordance with this invention has indirect insecticide properties in that by lowering the pH the life cycle of certain insects is interrupted and hence the insect is controlled, i.e. by the application of TCM to a habitat the pH is lowered to less than 5, a point at which the formation and growth of the Darkling beetle will not occur.

This brief statement in the specification in no way provides an enabling disclosure for lowering the pH of an animal habitat resulting in the control of insects. For example, in the examples provided in the specification wherein TCM was applied to animal habitats, there is no evidence or suggestion that the pH of said animal habitats was lowered. Put simply, there is no evidence of record that applying TCM to animal habitat will lower the pH of said habitat and control

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insects, other than Applicant's statement at pages 9-10 that such is the case. However, animal habitats are generally not closed systems. As such, while dusting an animal habitat *may* result in a local lowering of pH on surfaces (e.g., the floor), it is not seen that the "pH of the animal habitat" can be lowered to less than 5.

Finally, with respect to Applicant's argument that spraying with an aqueous solution will also lower the pH of the air when droplets remain volatilized, this argument is not persuasive because this is not claimed. For example, in claims 39 and 48, it is only claimed that the habitat is "soaked" with an aqueous solution. Such soaking does not imply that a solution is sprayed and that droplets remain volatilized.

***Claim Rejections - 35 USC § 112 (1<sup>st</sup> Paragraph)***

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 34-42 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This is an Enablement Rejection.

In the instant case, claims 34-42 are drawn to a method of "controlling insects in an animal habitat" comprising treating an animal habitat with an effective amount of trichloromelamine such that the pH of the habitat is lowered to less than 5 (claim 34). Newly

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submitted claims 43-51 recite the limitation wherein the insect is a Darkling beetle (claim 43).

Applicant points to pages 9-10 of the specification as providing support for the instant claims. In the specification, it is stated that trichloromelamine has “indirect insecticide properties” in that lowering the pH the life cycle of “certain insects” is interrupted. The only insect mentioned is the Darkling beetle (pages 9-10). However, there is no evidence of record that applying TCM to an animal habitat will: 1) lower the pH of the habitat to a pH less than 5, and 2) control insects.

To be enabling, the specification of the patent application must teach those skilled in the art how to make and use the full scope of the claimed invention without undue experimentation.

*In re Wright*, 999 F.2d 1557, 1561 (Fd. Cir. 1993). Explaining what is meant by “undue experimentation,” the Federal Circuit has stated that:

The test is not merely quantitative, since a considerable amount of experimentation is permissible, if it is merely routine, or if the specification in question provides a reasonable amount of guidance with respect to the direction in which experimentation should proceed to enable the determination of how to practice a desired embodiment of the claimed invention. *PPG v. Guardian*, 75 F.3d 1558, 1564 (Fed. Cir. 1996).

The factors that may be considered in determining whether a disclosure would require undue experimentation are set forth by *In re Wands*, 8 USPQ2d 1400 (CAFC 1988) at 1404 wherein, citing *Ex parte Forman*, 230 USPQ 546 (BdApl 1986) at 547 the court recited eight factors:

- 1) the quantity of experimentation necessary,
- 2) the amount of direction or guidance provided,
- 3) the presence or absence of working examples,

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- 4) the nature of the invention,
- 5) the state of the prior art,
- 6) the relative skill of those in the art,
- 7) the predictability of the art, and
- 8) The breadth of the claims.

These factors are always applied against the background understanding that scope of enablement varies inversely with the degree of unpredictability involved. *In re Fisher*, 57 CCPA 1099, 1108, 427 F.2d 833, 839, 166 USPQ 18, 24 (1970). Keeping that in mind, the Wands factors are relevant to the instant fact situation for the following reasons.

Aside from a brief mention of the alleged insecticide properties of trichloromelamine, there is no evidence that application of trichloromelamine will have the claimed effect. While Applicant has demonstrated that application of trichloromelamine effectively decreases ammonia and salmonella bacteria in animal habitats treated with trichloromelamine, there is no evidence or support for the alleged effect of controlling insects in an animal habitat by application of trichloromelamine.

Further, the claims recite that the pH is lowered to less than 5. Applicant has provided no guidance or direction on how one skilled in the art will lower the pH of an animal habitat. It is not predictable that simply applying trichloromelamine will effectively lower the pH of an animal habitat so as to control insects. For example, dusting an animal habitat with powdered trichloromelamine might be expected to potentially lower the pH of surfaces covered with the agent, however the surrounding air and habitat would likely not have a lower pH. Further still,

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not all insects have pH-dependent life cycles. As such, lowering the pH of an animal habitat will not predictably result in control of any and all insects as contemplated by the claims.

The claims are broad, reciting the control of any and all insects comprising treating an animal habitat with trichloromelamine. Said treatment is claimed to lower the pH of the habitat to less than 5. However, as noted *supra*, Applicant has provided very minimal guidance with respect to the claimed invention. In fact, the claimed effect of "controlling insects" is given no more than a cursory mention in the specification.

Because of the known unpredictability of the art (as discussed *supra*) and in the absence of experimental evidence commensurate in scope with the claims, the skilled artisan would not accept the assertion that treatment of an animal habitat with trichloromelamine could be predictably used to control insects and lower the pH in animal habitats as inferred in the claims and contemplated by the specification. Accordingly, the instant claims do not comply with the enablement requirement of 35 U.S.C. § 112, first paragraph, since to practice the claimed invention a person of ordinary skill in the art would have to engage in undue experimentation, with no assurance of success.

### ***Double Patenting***

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The



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filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

U.S. Patent No. 6,749,804

Claims 34-51 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-16 and 26-39 of prior U.S. Patent No. 6,749,804. This is a double patenting rejection.

The Examiner is reapplying this ground of rejection for the following reasons. The instant claims recite a method of “controlling insects” or “controlling Darkling beetles” comprising treating an animal habitat with trichloromelamine such that the pH of the habitat is lowered to less than 5. The claims of the ‘804 patent recite methods of reducing the production of ammonia and odors in an animal habitat and “sanitizing” an animal habitat comprising applying an effective amount of trichloromelamine. The method steps of the pending claims and the claims of the ‘804 patent are identical. For example, both sets of claims recite treatment prior to the placement of animals in the habitat, treatment after placement of animals in the habitat, treatment prior to and after placing animals in the habitat, dusting and soaking the animal habitat, and concentrations of from about 25 ppm to about 1000 ppm. As such, the results of such treatment will be the same and are inseparable with respect to patentability.

As there is no evidence of record that applying trichloromelamine to an animal habitat in the amounts claimed in the ‘804 patent (which are the same as those instantly claimed) will not result in a lowering of pH and control of insects, the instant claims claim the same invention as that claimed in the ‘804 patent. In fact, at column 5, lines 24-31 of the ‘804 patent, it is disclosed that application of TCM **in accordance with this invention** has “indirect insecticide properties”. Accordingly, the Terminal Disclaimer filed 3/16/2007 cannot be used to overcome this rejection.

U.S. Patent No. 6,616,892

Claims 34-51 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-12 and 20-30 of prior U.S. Patent No. 6,616,892. This is a double patenting rejection.

The Examiner is reapplying this ground of rejection for the following reasons. The instant claims recite a method of “controlling insects” or “controlling Darkling beetles” comprising treating an animal habitat with trichloromelamine such that the pH of the habitat is lowered to less than 5. The claims of the ‘892 patent recite methods of reducing the production of ammonia and odors in an animal habitat (claims 1-12) and “sanitizing” an animal habitat (claims 20-30) comprising applying an effective amount of trichloromelamine. The method steps of the pending claims and the claims of the ‘892 patent are identical. For example, both sets of claims recite treatment prior to the placement of animals in the habitat, treatment after placement of animals in the habitat, treatment prior to and after placing animals in the habitat, dusting and soaking the animal habitat, and concentrations of from about 25 ppm to about 1000 ppm. As such, the results of such treatment will be the same and are inseparable with respect to patentability.

As there is no evidence of record that applying trichloromelamine to an animal habitat in the amounts claimed in the ‘892 patent (which are the same as those instantly claimed) will not result in a lowering of pH and control of insects, the instant claims claim the same invention as that claimed in the ‘892 patent. In fact, at column 5, lines 8-13 of the ‘892 patent, it is disclosed that application of TCM **in accordance with this invention** has “indirect insecticide properties”. Accordingly, the Terminal Disclaimer filed 3/16/2007 cannot be used to overcome this rejection.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D. Anderson whose telephone number is 571-272-9038. The examiner can normally be reached on MON-FRI 9:00 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



James D. Anderson  
Patent Examiner  
AU 1614

October 29, 2007



ARDIN H. MARSCHEL  
SUPERVISORY PATENT EXAMINER